CIRM Shared Research Laboratory Information Form – Part Two

Section A. Project Information

Project Title	The Childrens Hospital Los Angeles hESC Facility

Limited to 300 Characters

Project Start Date	Aug 1, 2007	Construction Start Date	February 1, 2008	Occupancy Date	July 1, 2008

Total Part Two Funds Requested for Shared Laboratory Space	$2,453,717
Total Part Two Funds Requested for Stem Cell Techniques Course	
Total Capital Funds Requested	$1,253,564

Note: All green fields are calculated values. Do not enter a value in the field.

Please indicate whether you propose to apply for funding of a Stem Cell Techniques Course along with the Shared Laboratory Space, or just the Shared Laboratory Space.

(●) Shared Research Laboratory only ( ) Shared Research Laboratory and Stem Cell Techniques Course

NOTE: Please be aware that any information you provide in this form will be made publically available.

Section A. 1. Program Director

Name	Prefix	First	Middle	Last	Suffix
	Dr.	Gay	M	Crooks	

Email (office)	gcrooks@chla.usc.edu	This email address identifies you to CIRM. Please use this email address for all correspondence with CIRM.
Application Number	CL1-00507-1	This field should fill automatically, based on the email address. If not, enter the number you received via email from CIRM, in the form "XX9-99999-9", where "X" is a letter, and "9" is a digit.

Section A. 2. Facilities Contact

Name	Prefix	First	Middle	Last	Suffix
	Mr.	Robert	P	Hollowell	

Institution	Children's Hospital of Los Angeles	If your institution is not listed, please identify the name of the institution here.
Other Institution		
Position Title	Director, Facilities Operations	
Department	Facilities Operations	
Address	4650 Sunset Boulevard	

City	Los Angeles			CA	Zip Code 90027
Phone Number	(323) 669-2400	Ext		Fax Number	(323) 666-8857

Email (office)	bhollowel@chla.usc.edu	This email address identifies you to CIRM. Please use this email address for all correspondence with CIRM.

(Revised 03/07/2007)

Section A. 3. Public Abstract

See Appendix A.

Section A. 4. Statement of Benefit to California

See Appendix A.

CIRM Shared Research Laboratory Information Form – Part Two

Section B. Laboratory Renovation Plan

Project Manager	Robert Hollowell		Construction Supervisor	Roy Kuntz
Title	Director of Facility Operations		Title	General Superintendent
Company/Institution	Childrens Hospital Los Angeles		Company/Institution	Tiller Constructors Inc

Describe plans for development/renovation of the shared laboratory space including fixed equipment costs. Include a description of the current space and how it will be renovated and reconfigured to form the laboratory. Include as attachments one 11x17 page of the current floor plan space and one 11x17 page of proposed floor plan of the renovated space. Describe all renovations that will be done. Describe how the project will be managed and tracked, as well as how change orders will be handled. For laboratories that are proposed to be located in leased space, provide information regarding the institution's long-term access to the leased space. Describe plans and schedule for all phases of development including design, construction, and installation of equipment leading to a functional laboratory. Give a proposed contingency plan in case of cost overruns. Any additional costs due to budget overruns will be the responsibility of the grant recipient. (narrative limited to 3 pages)

1. Description of current space and how it will be renovated/reconfigured
Our proposal is to create a centralized laboratory area that will house the hESC Core, and provide contiguous laboratory space for sole use of investigators performing hESC research. The centralization and sharing of these facilities and the close interaction of the hESC Core with investigators, will produce significant economies of scale regarding equipment and space usage and meet a critical need for cross fertilization of ideas, technical assistance for less experienced researchers and research oversight.

A total of 3064sq ft of contiguous space on the third floor of the Smith Research Tower at CHLA is available for renovation to create the CHLA hESC Facility. The area identified was previously part of the vivarium at CHLA, and has become vacant since the establishment of a new animal facility in the Saban Research Building. No major structural modifications will be required for the conversion of the old vivarium space into an hESC shared laboratory facility, because the existing layout is, through good fortune, ideal for these purposes. Access to all the tissue culture rooms (including the Core) will be limited to approved users through an electronic security card system. The assigned area consists of 2,471 sq ft, comprising 2,244 sq ft usable laboratory space and 227 sq ft of office space as follows:

• Four tissue culture rooms (total 1330 sq ft), all with positive pressure air handling: One room (3 work spaces) will be used for the hESC Core (305B), and three rooms, TC#1 (305A), TC#2 (306B), and TC#3 (307B) (with total 9 work spaces), will be available for investigators at CHLA and neighboring institutions to perform hESC cultures. Each room contains three tissue culture hoods (one/room with a dissecting microscope), two double incubators, and bench space for 1 inverted microscope and a refrigerated centrifuge. The two larger tissue culture rooms (TC #2 and 3) share an equipment room that contains 2 refrigerators, a -20C freezer, a double water bath, and gowning and storage areas. The two other tissue culture rooms (TC#1 and the hESC Core) will each contain 1 refrigerator and use the -20C freezer and waterbath situated in an adjacent Equipment Room (303A). One of the main concerns we have for the tissue culture areas is to minimize the risk of contamination of cultures. With this in mind we have placed as much as possible of the “dirty” equipment (such as waterbaths) outside the immediate culture area, and will engineer the air handling to provide maximal pressure in the tissue culture rooms, stepping down to the antechamber areas and down again to the corridors and equipment areas.

• Four shared equipment rooms (total 634 sq ft) comprising 1. The freezer room (330B), housing two -80 freezers, two liquid N2 freezers, two -20 freezers, and a controlled rate freezer 2. the molecular lab (330A). containing a sink, Real time PCR (Taqman), two standard PCR machines, two -20C freezers, one refrigerator, one cytocentrifuge machine and benches and equipment for gel electrophoresis, 3. the Dark room (307A) housing two fluorescent (inverted and compound) microscopes and storage space, and 4. the PCR set up room (306C), which will contain a bench that can be used to set up PCR reactions, separate from the molecular analysis room thus preventing the risk of cross contamination.

• Storage space (total 100 sq ft, 305C) containing 9 locked metal cabinets for storage of supplies used by each group using the facility. This room will be created from the area that previously served as a corridor linking the Smith Research Tower to the adjacent Santa Anita Building (now demolished) by building a wall and adding a door at the east end and an internal wall at the west end of the area.

• Additional equipment room (total 180sq ft, 303A) requires minimal renovation and will be available for equipment needed for the hESC Core and Tissue Culture Room #1, including a -20C freezer, table and double waterbath, and extra storage as needed.

Section B -- 1. Laboratory Renovation Plan (continued)

• Office space (total 227 sq ft) will consist of a small inner room for hESC Core personnel (303C) and an outer room available for investigator meetings (303B).

The renovations required to create the new facility include:
(1) Optimization of air handling to obtain positive pressure air flow directions from tissue culture to ante chambers and to corridors,
(2) Air conditioning modifications for temperature control in new freezer room (330B),
(3) Physical separation of the facility from surrounding laboratories by sealing of two existing doorways to the corridor (307A and 307D), and creation of a new door for the south entrance,
(4) Installation of bench spaces,
(5) Modifications to electrical supply, and installation of phone and network connections,
(6) Removal of old autoclave from 307D and sterilizer from 306C,
(7) Creation of closed storage area from previous corridor area as described above (305C),
(8) Installation of card key systems for 4 tissue culture rooms, installation

2. How the Project will be managed and tracked
The project will be closely managed by Mr Robert Hollowell (Project Manager) and Mr Roy Kuntz (Construction Supervisor) who have extensive experience working successfully together on remodeling and building projects in the CHLA hospital, and in the Smith and Saban research buildings over the past 12 years. Construction progress will be checked and tracked on a daily basis by the Project Manager Bob Hollowell. Regular meetings with a walk-through of the area under construction by the Project Manager, Construction supervisor and Program Director (Dr Crooks) will occur on a monthly basis. In addition, the Program Director will be readily available as needed to provide any necessary input during the process. Dr Crooks' office and laboratory are directly below the area to be remodeled, and as such she will be able to give close oversight and assistance throughout the project.

The Program Director and staff from TSRI will supply the administrative personnel responsible for purchasing and installation of equipment. Quotations on all large equipment have already been obtained and equipment vendors compared for cost. Mr Ken Mitsuhata, Administrator, Research Operations of The Saban Research Institute, will work with the Construction Supervisor to coordinate delivery and installation of all large equipment.

In addition to creating the working drawings, the Architect's administrative/management role will be to monitor the progress of construction, assure conformity to the construction documents and compliance with safety regulations, review specified submittals, respond to RFIs (requests for Information) and generate IB's (instruction bulletins) and addendums when required.

3. Change orders
In the event of a possible need to change any aspect of the Project, the Contractor will submit a written RFI to the Architect and Project Manager. The Architect will either respond in a clarification or will generate an IB. If the IB requires a change in the Construction Documents (CD), the Architect will be directed to prepare a change order (CO).

The Architect and Project Manager will investigate the IB as to the cause, i.e. whether it was a design omission, constructability issue or an unseen condition. The Project Manager has a zero tolerance for changes; therefore no owner requested changes will be allowed after the permitted drawings have been issued for construction.

The Contractor will be requested to prepare a cost estimate and schedule impact of the change to the Architect and Project Manager for review. If the CO is approved, the Contractor, Architect and Project Manager will sign the approved change order.

The Project Manager will review the budget for the project and verify if the cost can be carried in the project or if it will cause a cost over-run. If a cost over-run will result, the Project Manager will inform the Program Director, Dr Crooks to identify a fund source for the over-run.

The Architect will be instructed to incorporate the change in the CD and submit an application for approval from the permitting regulatory agency having authority. Once approved, the Contactor is instructed to proceed with the work.

Section B -- 1. Laboratory Renovation Plan (continued)

4. Plans and schedule for all phases of development
Preliminary plans have already been prepared (see Attachments A, B) and will be finalized and approved at time of the grant award (estimated to be August 1). Quotations for architectural and engineering design and administrative oversight have been obtained (Attachment C). Thus, preparation of the Working Drawings can begin at the time the Grant is awarded and are anticipated to take 4 months to complete (Dec 1, 2007). Advertising for the Construction Contract will begin when the Working Drawings are completed and will be completed in 1 month (Jan 1, 2008). We expect the Contract will be awarded and construction begun 1 month later (Feb 1, 2008) and will take 4 months to complete. Purchase of the equipment will begin during construction and be completed before construction is over. Delivery and installation of equipment will be arranged to coincide with the completion of construction and take 1 month to complete (June 1, 2008). We anticipate that occupancy and notice of completion will occur by July, 2008.

5. Contingency plan in case of cost overruns
The Saban Research Institute has pledged to cover up to 7% of the total project costs for contingencies in the case of cost overruns. A letter from Dr Donald Kohn, Interim Director of TSRI is attached (Attachment D). In the event of cost overruns exceeding 7% of the project costs, the Program Director will consult with the Oversight Committee and Project Manager to modify the project in a manner that allows maximal use of the existing laboratories and equipment. An example of such a modification would be the removal of either the smaller tissue culture room (TC#1) or the additional equipment room (303A) from the scope of work.

Section B. 1. Schedule/Timeline and Drawdown of Funds Table

Provide a realistic schedule and drawdown of funds for completing each activity/milestone, as indicated below.

#	Activity/Milestone	Start Date	Completion or Milestone Date	Amount of CIRM funds to be drawn
1	Grant Award (estimate)		August 1, 2007	
2	Request for Planning Funds (10% of Construction Costs)		August 1, 2007	$ 99,786
3	Prepare Preliminary Plans	February 1, 2007	August 1, 2007	
4	Approval of PPs		August 1, 2007	
5	Prepare Working Drawings	August 1, 2007	December 1, 2007	
6	Approval of WDs		December 1, 2007	
7	Request Construction Contract funds (80% of Construction Costs)			$798,285
8	Advertise for Construction Contract	December 1, 2007	January 1, 2008	
9	Award Construction Contract		January 1, 2008	
10	Construction Activities	February 1, 2008	June 1, 2008	
11	Completion of Equipment Purchases		April 1, 2008	
12	Request Equipment Purchase funds		January 1, 2008	$985,153
13	Beneficial Occupancy		July 1, 2008	
14	Notice of Completion		July 1, 2008	
15	Request Construction Completion Amount (10% of Construction Funding)		July 1, 2008	$ 99,786

"Preliminary Plans" (PPs) represent approximately 35 percent of the design effort, or may be considered the product of completing the "Design Development" (DDs) phase of architectural work.

"Working Drawings" (WDs) represent drawings and specifications from which a contractor may determine the full extent of work contemplated in the project for purposes of submitting a bid; may be referred to as completion of "Construction Documents" (CDs) phase of architectural work.

Section B. 2. Budget

Provide a complete budget for the renovation that includes construction costs, design fees, administration of the project, other costs (i.e. installation of equipment) and a construction contingency (limited to 7-10% of the construction budget). Identify the amount of CIRM funds requested and the matching funds (construction requires 20% matching funds). Provide a complete budget for movable equipment (equipment requires 20% matching funds). (narrative limited to 3 pages)

(Note: An Excel spreadsheet can be attached as long as the total submission for this Section is limited to 3 pages)

1. Construction and Design costs
The gross area of the hESC facility is 3064sq ft, of which 2471 sq ft will be usable (assignable) space. Construction costs of $1,055,200 are estimated using a calculation of $450 per sq ft of renovated lab space (2244 sq ft), and $200 per sq ft of office and meeting space (227sq ft).

The major construction cost involved with this project is for the necessary upgrades to the air handling, air conditioning and electrical systems of the areas which were previously used as an animal care facility and are inadequate for the planned usage. Other significant costs will be incurred to provide a discrete area that is physically separated from the other labs on the third floor of the Smith Research tower. To achieve this, we will need to seal off two doors and create a new double door in the southern most entry to the facility (the northern entrance already has double doors). In addition, 2 new walls and a door will be installed to create the storage area. A new electronic card access system will be installed to limit access to the tissue culture areas.

The office space requires relatively minor modifications (removal of shelves, painting, power connections) with no air handling changes and is thus less expensive than the laboratory space.

The proposal for architectural, and structural, mechanical and electrical engineering services totals $124,500 and is included as Attachment C.

2. Movable equipment
A detailed list of large and small, movable equipment for the hESC facility is shown in the Table in Attachment E. The position of each item is shown in the floor plans for the new space (Attachment B).

The Imagestream (Amnis Corp), an "imaging flow cytometer", will be purchased and housed in the Flow Cytometry Core facility on the second floor of the Smith Research Tower (Room 205), directly below the hESC Facility. By housing the machine in this space, the Manager of the Flow Cytometry Core (Ms Lora Barsky, 30%FTE) will be able to assist all users of this equipment.

3. Matching funds and contingency fees
20% of the costs of construction, design, and administration will be matched by TSRI financial reserves (see Attachment D). 20% of the equipment budget will be matched by CHLA through endowments of the Gene, Immunology and Stem Cell Therapy (GISCT) Program (Attachment F) The latter will incorporate partial support for the purchase of the Imagestream machine.

Non-federal funds from TSRI and GISCT were used to remodel and equip a small hESC Core (SRT122A) on the first floor of the Smith Research Tower (April-June, 2005). The expenses totaling $68,884 and itemized below, will therefore be applied to our institutional matching funds:
-Remodeling of SRT122A by Tiller Inc ($30,063)
-Relocation, decontamination and certification of two TC hoods to SRT122 ($3,843)
-Equipment: Dissecting microscopes ($27,000), hood modifications ($2,990), incubator ($4,967).

SRT122A will be available to use for hESC research including Core functions in the event that our needs exceed the new space and equipment on the third floor.

Contingency fees of $73,864 (7% of construction costs) will be covered mostly by TSRI of Childrens Hospital Los Angeles (see Attachment D, letter from Dr Donald Kohn, Interim Director TSRI).

Section B. 3. Budget Summary Table

Complete the budget summary for the use of CIRM funds.
Note: All colored fields contain calculated data. Please do not enter anything in those fields.

Other Project Costs				
Budget Category		**Total Budget**	**CIRM Grant Funds**	**Institutional Match**
Construction Contract Costs		$1,055,200	$ 879,333	$ 175,867
Other Construction Costs (institutional)				
Subtotal Construction		$1,055,200	$ 879,333	$ 175,867
Design Fees		$ 93,375	$ 77,813	$ 15,562
Administrative Costs		$ 31,125	$ 25,937	$ 5,188
Construction Contingency		$ 73,864	$ 14,773	$ 59,091
Total Construction		$1,253,564	$ 997,856	$ 255,708
Movable Equipment		$1,200,153	$ 985,153	$ 215,000
Total Budget		$2,453,717	$1,983,009	$ 470,708
Gross Square Feet	3064	$ 409.13	$ 325.67	Const Costs/GSF
Assignable Square Feet	2471	$ 507.31	$ 403.83	Const Costs/ASF

Section B. 4. Institutional Commitment

Provide a detailed description of the amount and source of matching funding for each request that requires matching funds. The requirement of matching funds can be satisfied if the institution can document funds, excluding other grant funds, committed to similar projects (i.e., renovation of lab space and equipment purchase) after January 1, 2005. Detail the use of the space after the three year period is completed. (narrative limited to 2 pages)

1. Amount and source of matching funds

Construction, design and administration costs totaling $1,179,700 will include a request to CIRM of $983,083 and matching of 20% of CIRM funding ($196,617) by The Saban Research Institute (TSRI) using existing financial reserves. An additional $14,773 is requested from CIRM to partially cover construction contingency; TSRI commits to covering the rest of the construction contingency (a total 7% of construction costs=$73,864). A letter from Dr Donald Kohn, Interim Director of TSRI, confirms these commitments (Attachment D).

Equipment costs will be matched 20% by the philanthropic endowment funds held by the Gene, Immunology and Stem Cell Therapy (GISCT) Program of TSRI. These matching funds will contribute to the purchase of the Imagestream Imaging Flow Cytometer. A letter from Dr Donald Kohn, Director of the GISCT Program, confirms this commitment (Attachment F).

Costs incurred by TSRI and the GISCT program during the establishment of a small hESC Core on the first floor of the Smith Research Tower (SRT 122A) during April-June, 2005 will be applied toward our institutional matching funds. Documentation is available for the following expenses totaling $68,884, that were covered using non-federal funds:

Total Remodeling of SRT122A by Tiller Inc = $30,063

Equipment:
Relocation, decontamination and certification of two Tissue Culture hoods to SRT122A ($3,843)
Dissecting microscopes x 2 ($27,000),
TC hood modifications to glass x2 ($2,990),
incubator ($4,967).

Total equipment=$38.821

SRT122A will be available to use for hESC research including Core functions in the event that our needs exceed the new space and equipment on the third floor.

2. Use of space after 3 years

We plan that the hESC Facility will continue to be used for hESC research for all CHLA investigators after the three year period of support from CIRM. CHLA through TSRI has supported an hESC Core since 2005 and is committed to continue support for this critical area of research at our institution. In addition, our investigators will also include budget lines in individual grants to help support this facility.

Section C. Stem Cell Techniques Course (if applicable)

Based on the information provided in Part One of the application describing the course, include a justification of the additional space required and additional equipment requested, if any. Include additional square footage and provide as an attachment one 11x17 page of the proposed floor plan of the renovated space. (narrative limited to 1 page)

N/A

Limit narrative to visible field area.

Section C. 1. Schedule and Drawdown of Funds Table (if applicable)

Provide a realistic schedule and drawdown of funds for completing each activity/milestone, as indicated below.

#	Activity/Milestone	Start Date	Completion or Milestone Date	Amount of CIRM funds to be drawn
1	Grant Award (estimate)			
2	Request for Planning Funds (10% of Construction Costs)			$ 000
3	Prepare Preliminary Plans			
4	Approval of PPs			
5	Prepare Working Drawings			
6	Approval of WDs			
7	Request Construction Contract funds (80% of Construction Costs)			$ 000
8	Advertise for Construction Contract			
9	Award Construction Contract			
10	Construction Activities			
11	Completion of Additional Equipment Purchases			
12	Request Additional Equipment Purchase funds			
13	Beneficial Occupancy			
14	Notice of Completion			
15	Request Construction Completion Amount (10% of Construction Funding)			$ 000

"Preliminary Plans" (PPs) represent approximately 35 percent of the design effort, or may be considered the product of completing the "Design Development" (DDs) phase of architectural work.

"Working Drawings" (WDs) represent drawings and specifications from whicha contractor may determine the full extent of work contemplated in the project for purposes of submitting a bid; may be referred to as completion of "Construction Documents" (CDs) phase of architectural work.

"Additional Equipment" represents equipment to be used for the Stem Cell Techniques Course.

Section C. 2. Budget (if applicable)

Provide a complete budget for the additional renovation that includes construction costs, design fees, administration of the project, other costs (i.e. installation of equipment) and a construction contingency (limited to 7-10% of the construction budget). Identify the amount of CIRM funds requested and the matching funds (construction requires 20% matching funds). Provide a complete budget for additional movable equipment (equipment requires 20% matching funds). (narrative limited to 3 pages)

(Note: An Excel spreadsheet can be attached as long as the total submission for this Section is limited to 3 pages)

Section C. 3. Budget Summary Table (if applicable)

Complete the budget summary for the use of CIRM funds.
Note: All colored fields contain calculated data. Please do not enter anything in those fields.

Other Project Costs				
Budget Category		**Total Budget**	**CIRM Grant Funds**	**Institutional Match**
Construction Contract Costs				
Other Construction Costs (institutional)				
Subtotal Construction				
Design Fees				
Administrative Costs				
Construction Contingency				
Total Construction				
Additional Movable Equipment				
Total Budget				
Gross Square Feet		$ 0.00	$ 0.00	Const Costs/GSF
Assignable Square Feet		$ 0.00	$ 0.00	Const Costs/ASF

CIRM Shared Research Laboratory Information Form – Part Two

Section D. Signature Page

Complete, save, and print Part Two of the Shared Research Laboratory Grant Information.

Submit electronic application as an email attachment to laboratory@cirm.ca.gov no later than 5:00pm PST on March 16, 2007.

Mail* the original executed Part Two application and five (5) copies to:

Shared Research Laboratory Grant Application
California Institute for Regenerative Medicine
210 King Street
San Francisco, CA 94107

***Mailing must be postmarked no later than March 16, 2007.**
Applications will not be accepted after these deadlines.

Project Start Date	Aug 1, 2007	Construction Start Date	February 1, 2008	Occupancy Date	July 1, 2008

Total Part Two Funds Requested for Shared Laboratory Space	$2,453,717
Total Part Two Funds Requested for Stem Cell Techniques Course	
Total Capital Funds Requested	$1,253,564

Facilities Contact

Mr. Robert P Hollowell
Director, Facilities Operations
Facilities Operations
Children's Hospital of Los Angeles
4650 Sunset Boulevard
Los Angeles, CA 90027
(323) 669-2400
bhollowel@chla.usc.edu

Authorized Organizational Official	Date
Print Name	Title
Program Director	Date
Print Name	Title

(Revised 03/07/2007)

CIRM Shared Research Laboratory Information Form – Part Two Supplement

Project Information

Application Number: CL1-00507-1

Program Director Name:

Historical Performance

Provide information on past performance for 3 projects.

	Project 1	Project 2	Project 3
Brief Project Title	Saban Research Building	GMP Laboratories	HIV Laboratories
Original Budget (Total project cost)	46,000,000	$1,155,392	$ 209,157
Final project cost	47,500,000	$ 953,280	$ 209,639
Scheduled Completion Date	April 28, 2003	Dec 15, 1997	June 23, 2005
Actual Notice of Completion Date	Sept 30, 2003	June 26, 1998	April 22, 2005
Gross Square Feet involved	88,500	3,244	970
Assignable Square Feet involved	49,500	3,244	970
Approximate number of change orders	30	35	4
Value of all change orders & claims	$1,500,000	$- 5,724	$ 19,496
Type of construction management	In-house Forces	In-house Forces	In-house Forces

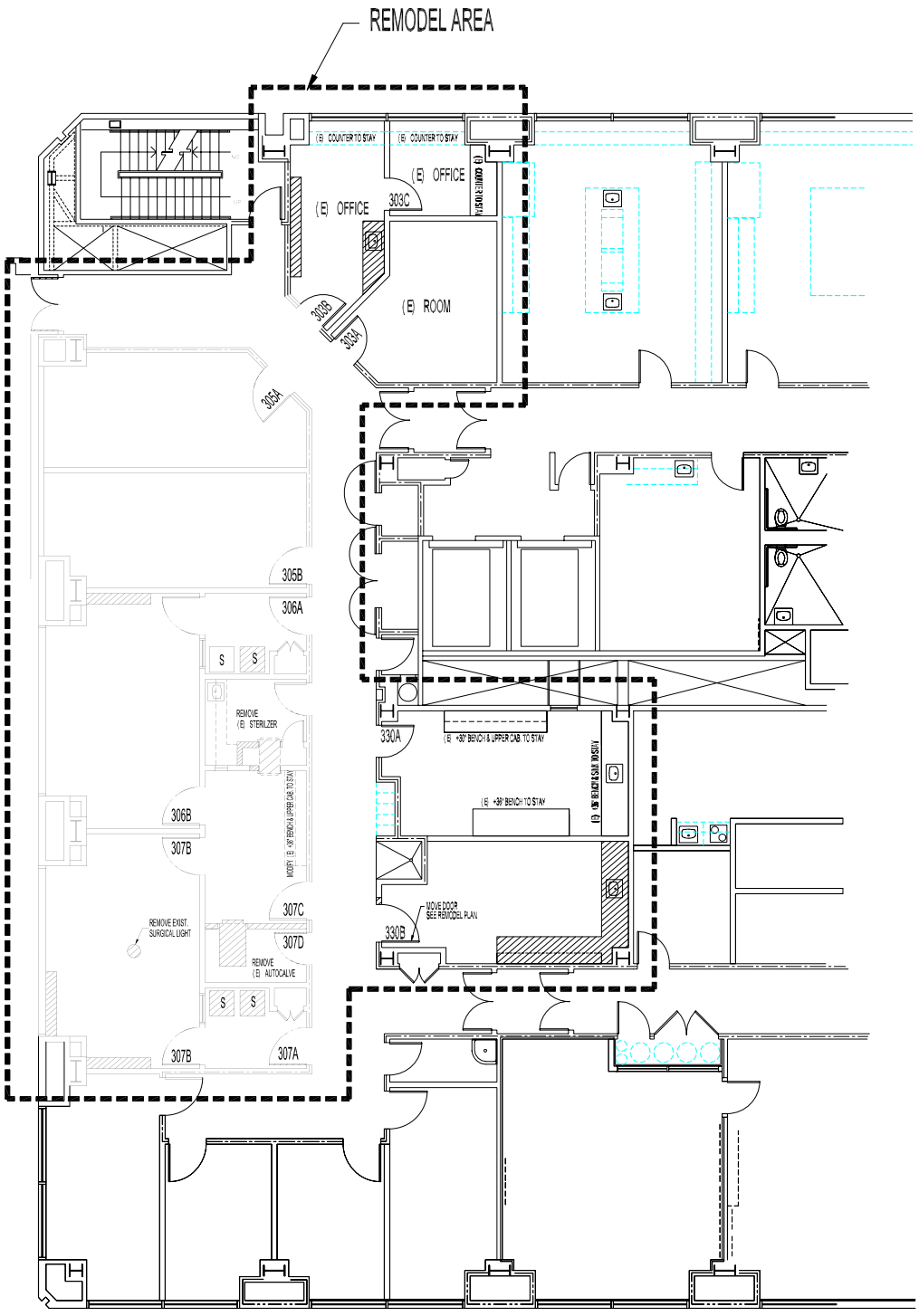
Laboratory Alteration Projects

Please enter the number of laboratory alteration projects completed by the applicant in the past 2 years (in the range of $1-5 million in project cost), and the approximate total dollar value that these projects represent.

Total Laboratory Alteration Projects: 0

Approximate Total Value: $ 000

Limit Budget Justification to visible field area.



TO BE REMOVED/DEMOLISHED

EXISTING PLAN & DEMOLITION PLAN

PORTION OF 3RD FLOOR SMITH TOWER - 03/13/2007

hESC SHARED LAB

GENERAL SCOPE OF WORK

1. – REMOVE DOORS AS SHOWN. FILL–IN EXISTING DOOR & WINDOW OPENING. FINISH TO MATCH EXISTING. SEE EXISTING PLAN & DEMOLITION PLAN FOR HATCHED ITEMS TO BE REMOVED & DEMOLISHED, I.E. REMOVE AUTOVLAVE, STERILIZERS, OTHERS.

2. – INSTALL NEW DOUBLE DOORS

3. – INSTALL 72"X30"X+30" COUNTER FOR THE FLUORESCENCE MICROSCOPES IN THE DARK RM.

4. – NEW +36" (H) BENCH

5. – RM 306B, 307B, 305A & 305B– INSTALL 4FT TISSUE CULTURE HOODS & 6FT TISSUE CULTURE HOODS AS SHOWN ON THE DRAWING. THERE WILL BE 1–MICROSCOPE INSIDE EACH 6 FT HOOD. PROVIDE AIR & VACUUM.

6. – INSTALL 30"(D) X 36"(H) COUNTERS WITH BASE CABINETS FOR THE CENTRIFUGES (6A, 6B, 6C)

7. – INSTALL 30"(D)X+36" COUNTER FOR THE INVERTED MICROSCOPE. TYPICAL FOR –4 IN RMS 305A, 305B, 306B & 307B

8. – RM 306C– WALL IN EXIST. STERILZER DOOR OPENING.

9. – INSTALL 4–CARD ACCESS AS SHOWN ON THE DRAWING.

10. – BUILD NEW WALLS. INSTALL NEW DOOR TO MATCH EXISTING.

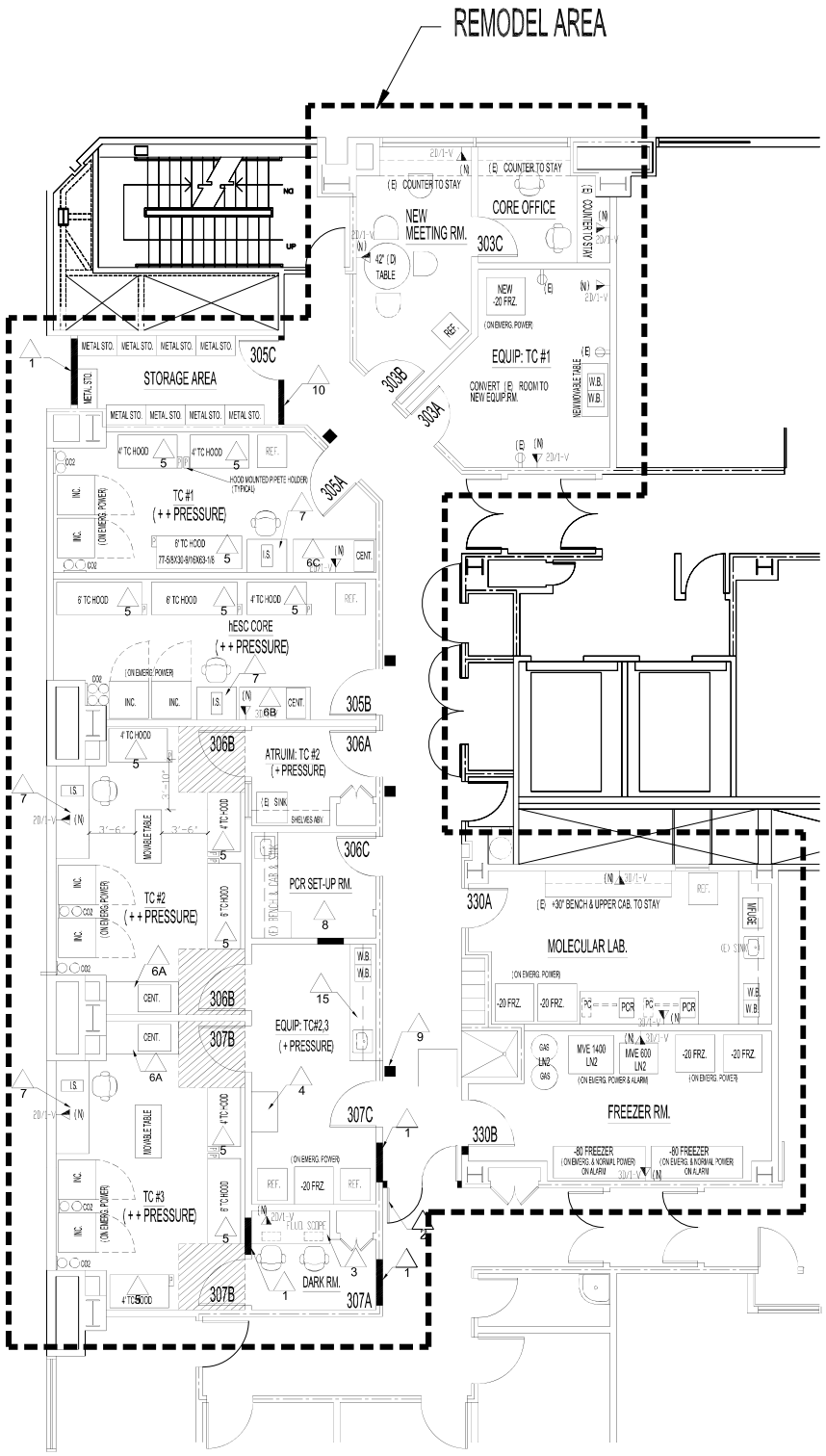
11. – REMODEL/MODIFY EXISTING HVAC TO SATISFY REMODEL REQUIREMENTS

12. – PROVIDE ALL NEEDED VOICE/DATA STUB–UPS.

13. – PROVIDE ALL NEEDED ELECTRICAL WORK FOR THE EQUIPMENT SHOWN ON THE DRAWING. ALL INCUBATORS & LIQUID NITROGEN FREEZERS SHALL BE ON EMERGENCY POWER. THE –80 FREEZERS SHALL BE ON EMERGENCY & NORMAL POWER & WITH ALARM. THE LIQUID NITROGEN FREEZERS NEED TO BE ON ALARM. SEE EQUIPMENT SCHEDULE & CUT SHEETS FROM FACOPS DEPT. INSTAL NEW POWER STRIP IN RM 303A, EQUP. RM FOR TC #2. INSTALL NEW VOICE/DATA DROPS.

14. – PATCH CEILING, WALLS & FLOORS AS REQUIRED. PAINT WALLS AS REQUIRED.

15. – MODIFY EXISTING CABINET TO ACCOMODATE NEW SINK. EXISTING UPPER CABINETS TO STAY.



REMODEL PLAN

PORTION OF 3RD FLOOR SMITH TOWER - 03/13/2007

hESC SHARED LAB

morris
architects

2046 Armacost Avenue
Los Angeles, CA 90025-6113
Phone 310.820.4600
Fax 310.820.4611

February 13, 2007

Mr. Robert P. Hollowell
Director
Facility Operations
Childrens Hospital Los Angeles
4650 Sunset Blvd.
Los Angeles, CA 90027

Re: Childrens Hospital Los Angeles
hESC Lab Remodel
Architectural/Engineering Services Proposal

Dear Bob:

I appreciate your giving us an opportunity to furnish you with a proposal to do the work required to make this project a reality. The team we plan on utilizing is as follows:

Morris Architects
Walter P. Moore, Structural Engineer
Maroko & Shwe, Inc., Mechanical Engineer
J.D. Crevier & Associates, Electrical Engineer

Scope of Project

1. As we understand it, the hospital wishes to remodel approximately 3200 square feet on the 3rd floor of the Smith Tower for this project. We were supplied a demolition plan and remodel plan produced by CHLA that we are using as a basis for our proposal. This project will fall under the jurisdiction of the Los Angeles Department of Building & Safety.

If any of the above scope is incorrect then please notify me right away.

Proposed Fee, Deliverables, Schedule
Fee:

1. We propose a lump sum fee of $124,500 which includes architectural services, structural, mechanical and electrical engineering. The fee breakdown is as follows:

Morris Architects	$70,000
Walter P. Moore	15,000
Maroko & Shwe	21,000
J.D. Crevier & Associates	18,500
Total	$124,500

2. Services to be provided include schematic design, design development, construction documents, building department submittal and backcheck corrections, bidding/negotiation services and construction administration services. Fee will be billed on a monthly basis. All additional services not covered under this agreement must be agreed to in writing by the Owner before commencement of said services by the architect.
3. This agreement may be terminated upon not less than seven days written notice for any of the following reasons:
    a. Should the other party fail substantially to perform in accordance with the terms of this agreement through no fault of the party initiating the termination.
    b. For the Owners convenience and without cause.
    c. By the architect if the project is suspended for more than 30 consecutive days by the Owner.
    d. In the event of termination not the fault of the architect, the architect shall be compensated for services performed prior to termination, together with reimbursable expenses then due.

Deliverables:

1 set of combined Schematic Design/Design Development drawings
1 set of Construction Documents plus specifications

It is anticipated that the above deliverables can be provided within the above fee. If any of the assumptions stated below do not hold true then we reserve the right to revise our fee upward. We will notify you in advance if we believe the scope of services required to meet the hospitals goal is likely to exceed our stated fee so that you have an opportunity to review our request in advance.

1. Assumes that existing architectural, structural and MEP systems within the building are adequate to support the proposed remodel.
2. Assumes that the design will be approved prior to the commencement of construction documents by the Owner.

3. Assumes the hospital will arrange and pay for 72 hour or 30 day demand load readings for existing distribution equipment. Our electrical engineer will determine for which panels the readings will be required.

Excluded Services:

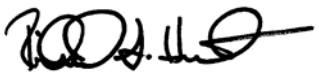
1. Cost Estimating
2. Scheduling
3. Payment of permit or plan review fees
4. Interior Design
5. FFE Inventory and Specifications

Schedule:

We are prepared to begin work immediately and adhere to a schedule of the hospitals choosing.

Thank you very much again for giving us the opportunity to make this proposal to you. Please do not hesitate to call if you should have any questions or concerns.

Sincerely,



Richard S. Houston, AIA
Associate Principal
Regional Director
California Architects License Number C25484

No.	LARGE EQUIPMENT	#	$ per item	Extended price	Tax	Freight & install	Total costs
1	Heraeus150 Trigas Incubator	16	5932.80	94924.80	8620.66	4512.00	108057.46
	Support frame	8	260.00	2080.00			2080.00
	Water bath Sheldon double	3	1400.00	4200.00	346.5	110.00	4656.50
2	**Hood SterilGard III, 4 feet**	7	7182.00	50274.00	4875.08	8740.00	63889.08
	Options	7	1259.70	8817.90			8817.90
3	**Hood Sterilgard III, 6 feet**	5	8720.30	43601.50	4776.54	incl.	48378.04
	Options	5	1364.20	6821.00			6821.00
	Microscope option	5	1495.00	7475.00			7475.00
4	**Taqman ABI 7900 HT FAST**	1	92500.00	92500.00	7631.25	1369.00	101500.25
5	**Inverted microscope CKX41**	4	6303.12	25212.48	3120.04		28332.52
	Olympus E-volt 500 35mmSLR	4	900.00	3600.00			3600.00
6	**Dissecting microscope Nikon**	4	13083.40	52333.60	4317.52		56651.12
	Service contract, 3 years		1140.00	1140.00			1140.00
7	**Fluoresc microscope, inverted**	1	24158.61	24158.61	1993.09		26151.70
	Advanced software pkg	1	4800.00	4800.00	396		5196.00
	Service contract, 3 years		600.00	600.00			600.00
8	**Camera for inv Fluoresc microscope**	1	7950.00	7950.00	655.88		8605.88
9	**Compound fluor microscope**	1	57545.00	57545.00	4747.46		62292.46
	Computer	1	3000.00	3000.00	247.5		3247.50
10	**Freezer, -20C,MFB2920**	6	2870.00	17220.00	1420.65	2587.00	21227.65
11	**Chest Freezer,** So Low 17 cu ft	2	5895.00	11790.00	1945.36	1350.00	15085.36
	Racks, 36/freezer	72	60.00	4320.00			4320.00
12	**Refrigerator LRB 23**	5	2731.00	13655.00	1040.00	2587.00	17282.00
13	**Liq nitrogen MVE 1400**	1	18650.00	18650.00	1538.63	825.00	21013.63
	3 year warranty	1	2750.00	2750.00			2750.00
14	**Liq Nitrogen MVE 600**	1	13980.00	13980.00	1153.35	750.00	15883.35
	3 year warranty			2750.00			2750.00
15	**Cont rate freezer KRYO16**	1	19970.00	19970.00	1647.53	750.00	22367.53
16	**Centrifuge Allegra X22R**	2	7748.74	15497.48	1278.54	500.00	17276.02
17	**Centrifuge Allegra X15R**	2	8549.05	17098.10	1410.6	500.00	19008.70
18	**Centrifuge Biofuge**	2	4435.53	8871.06	731.86	100.00	9702.92
19	**Cytospin**	1	7000.00	7000.00	577.5		7577.50
	2nd y service contract			737.00			737.00
20	**Storage cabinet**	9	399.00	3591.00	296.26		3887.26
21	**Amnis Imagestream**	1	275,000	275000.00	33066.00	0.00	308066.00
	excitation laser (405nm)	1	35,000	35000.00			35000.00
	workstation	1	5,000	5000.00			5000.00
	software-lab license(20)	1	25,000	25000.00			25000.00
	training-advanced operator	1	5,000	5000.00			5000.00
	service contract (yrs 2&3)	2					55800.00
	TOTAL LARGE EQUIP						1162227.33
	SMALL EQUIPMENT	#	**$/item**				**total price**
22	**Bench chairs**	18	455.26				8194.68
23	**Desk chairs**	7	274.05				1918.35
24	**Table for office room 42"D**	1	219.95				219.95
25	**Gel boxes**	4	426.15				1704.6
26	**Power supplies for gel boxes**	2	556.43				1112.86
27	**Microwave**	1	119.99				119.99
28	**UV cross linker**	1	1374.12				1374.12
29	**Vortex**	4	300.05				1200.2

CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE

Appendix A

Application: CL1-00507-1

Title: The Childrens Hospital Los Angeles hESC Facility

Public Abstract:

Our institution is a tertiary-care academic pediatric medical center that combines care of severely ill children, research into the causes and treatments of childhood disorders, and training of the next generation of pediatric clinical physicians, nurses and allied health care professionals and biomedical scientists. A unique focus of the research in our institution is on applications to pediatric disorders such as diabetes, inherited disorders (cystic fibrosis, muscular dystrophy, sickle cell disease, etc), cancer and congenital birth defects. It is our central hypothesis that childhood disorders will be especially responsive to therapies produced by the use of stem cells; advances in the use of stem cells to treat childhood illnesses will then lead the way to treatments for the many disorders that occur later in life. For over a decade, the Stem Cell Program at our institution has been at the leading edge of translational research for cell and gene therapy and tissue engineering, with outstanding research programs in stem cells, gene therapy, developmental biology, organogenesis and transplantation immunology. Active research programs studying adult stem cells (hematopoietic, mesenchymal, pancreatic, hepatic, pulmonary, amniotic) and human and murine embryonic stem cells, interact closely with clinical Centers of Excellence in organ and hematopoietic stem cell transplantation, diabetes, cancer and blood diseases, neonatology, as well as a full array of pediatric secondary and tertiary care programs. These academically-oriented clinical programs have a long-standing tradition of inter-weaving research and clinical trials with patient care, to develop and evaluate innovative new treatments for severe pediatric and adult disorders. A Core Laboratory for studies with human embryonic stem cells (hESC) was established in 2005, using institutional funding. The hESC Core has supported initial studies and developed a formal training program in methods for the growth of hESC; 40 scientists from 5 research institutions in Southern California have attended the training course to date. However, the technical and regulatory burdens inherent in hESC research, have significantly restricted further development of individual hESC research projects within the limited existing laboratory space at our institution. Funding is thus requested to remodel and equip approximately 3000 sq ft of existing space (2500 sq ft of usable laboratory space) to create a suite of laboratories for dedicated use as an hESC Core facility alongside shared laboratory space for investigators involved in hESC research. We anticipate the laboratories and equipment established using this grant will support the research of at least 20 scientist investigators at our institution and will be also made available to researchers at nearby institutions across Southern California.

Statement of Benefit to California:

Development of methods for regenerative medicine using human embryonic stem cells (hESC) will have wide-spread applications to improve the health for millions of Californians and tens of millions of people world-wide, by providing novel, effective therapies. Regenerative medicine may provide new treatments for diseases including diabetes mellitus, Parkinson's disease, organ failure and injuries, inherited diseases and cancer and leukemia. The major challenge facing the field of regenerative medicine is to increase knowledge of the processes by which the mature cells of tissues (pancreas, brain, bone marrow, etc.) develop from stem cells, so that clinical approaches can be developed to produce cells suitable for transplantation. It is essential to establish laboratory facilities that can be used for research on hESC in a centralized manner that complies with all California and Federal guidelines. The hESC Core Laboratory and shared facilities to be developed based on this application will provide a resource to support research in stem cells by investigators from our institution, as well as investigators from across the Southern California region.